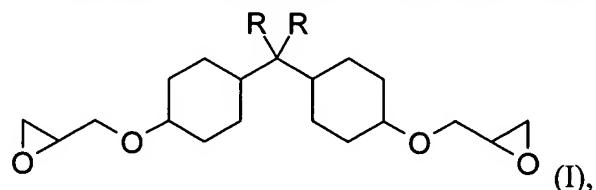


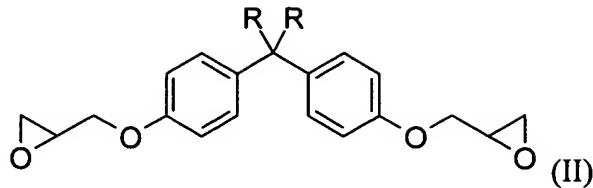
AMENDMENTS TO THE CLAIMS

1. (Currently amended) A heterogeneous ruthenium catalyst comprising a support material ~~based on comprising~~ amorphous silicon dioxide, wherein the ~~percentage~~ ratio of the signal intensities of the Q₂ and Q₃ structures Q₂/Q₃ in the silicon dioxide ~~as~~ determined by ~~means~~ of solid-state ²⁹Si-NMR is less than 25.
2. (Currently amended) The ruthenium catalyst according to claim 1, wherein the ~~percentage~~ ratio of the signal intensities of the Q₂ and Q₃ structures Q₂/Q₃ is less than 20.
3. (Currently amended) The ruthenium catalyst according to claim 1, wherein the ~~percentage~~ ratio of the signal intensities of the Q₂ and Q₃ structures Q₂/Q₃ is less than 15.
4. (Currently amended) The ruthenium catalyst according to ~~any of the preceding claims~~ claim 1, wherein the total concentration of Al(III) and Fe(II and/or III) in the silicon dioxide is less than 300 ppm by weight.
5. (Currently amended) The ruthenium catalyst according to ~~any of claims 1 to 3~~ claim 1, wherein the total concentration of Al(III) and Fe(II and/or III) in the silicon dioxide is less than 200 ppm by weight.
6. (Currently amended) The ruthenium catalyst according to ~~any of the preceding claims~~ claim 1, wherein the silicon dioxide comprises alkaline earth metal cations (M^{2+}) ~~are comprised in the silicon dioxide (M II)~~ in a weight ratio of M(II) : (Al(III) + Fe(II and/or III)) of [>] greater than 0.5.
7. (Currently amended) The ruthenium catalyst according to ~~any of claims 1 to 5~~, wherein ~~alkaline earth metal cations (M^{2+}) are comprised in the silicon dioxide in a~~ claim 6, wherein the weight ratio of M(II) : (Al(III) + Fe(II and/or III)) [of >] is greater than 1.
8. (Currently amended) The ruthenium catalyst according to ~~any of claims 1 to 5~~, wherein ~~alkaline earth metal cations (M^{2+}) are comprised in the silicon dioxide in a~~ claim 6, wherein the weight ratio of M(II) : (Al(III) + Fe(II and/or III)) [of >] is greater than 3.

9. (Currently amended) The ruthenium catalyst according to any of the preceding claims which has been claim 1 produced by single or multiple impregnation of the support material with a solution of ruthenium(III) acetate, drying and reduction.
10. (Currently amended) The ruthenium catalyst according to any of the preceding claims claim 1, wherein the support material ~~based on amorphous silicon dioxide~~ has a BET surface area (in accordance with DIN 66131) ~~in the range from 30 to 700 m²/g~~.
11. (Currently amended) The ruthenium catalyst according to any of the preceding claims claim 1, wherein the catalyst comprises from 0.2 to 10% by weight of ruthenium, based on the weight of the silicon dioxide support material.
12. (Currently amended) The ruthenium catalyst according to any of the preceding claims claim 11, wherein the catalyst comprises less than 0.05% by weight of halide (determined by ion chromatography), based on the total weight of the catalyst.
13. (Currently amended) The ruthenium catalyst according to any of the preceding claims claim 1, wherein the catalyst comprises ~~a support material based on silicon dioxide and elemental ruthenium, with the ruthenium being concentrated as a shell at the catalyst surface~~.
14. (Currently amended) The ruthenium catalyst according to the preceding claim claim 13, wherein the elemental ruthenium in the shell is partially or fully crystalline.
15. (Currently amended) A process for preparing a bisglycidyl ether of the formula I



where R is CH₃ or H, by ring hydrogenation of the corresponding aromatic bisglycidyl ether of the formula II

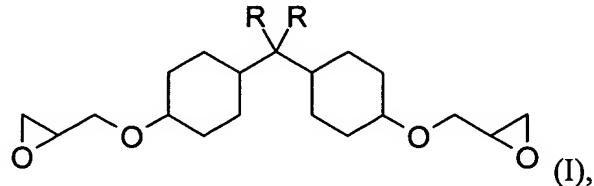


in the presence of a ~~catalyst~~, wherein a heterogeneous ruthenium catalyst according to ~~any of claims 1 to 14~~ is used claim 1.

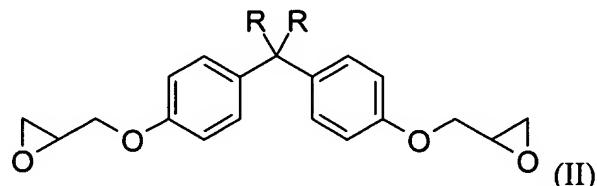
16. (Currently amended) The process according to claim 15, wherein the aromatic bisglycidyl ether of the formula II ~~which is used~~ has a content of corresponding oligomeric bisglycidyl ethers of less than 10% by weight.
17. (Currently amended) The process according to claim 15, wherein the aromatic bisglycidyl ether of the formula II ~~which is used~~ has a content of corresponding oligomeric bisglycidyl ethers of less than 5% by weight.
18. (Currently amended) The process according to claim 15, wherein the aromatic bisglycidyl ether of the formula II ~~which is used~~ has a content of corresponding oligomeric bisglycidyl ethers of less than 1.5% by weight.
19. (Currently amended) The process according to claim 15, wherein the aromatic bisglycidyl ether of the formula II ~~which is used~~ has a content of corresponding oligomeric bisglycidyl ethers of less than 0.5% by weight.
20. (Currently amended) The process according to ~~any of claims 16 to 19~~ claim 16, wherein the content of oligomeric bisglycidyl ethers is determined by heating the aromatic bisglycidyl ether at 200°C for 2 hours and at 300°C for a further 2 hours, in each case at 3 mbar.
21. (Currently amended) The process according to ~~any of claims 16 to 19~~ claim 16, wherein the content of oligomeric bisglycidyl ethers is determined by means of GPC (gel permeation chromatography).

22. (Currently amended) The process according to ~~the preceding~~ claim 21, wherein the content of oligomeric bisglycidyl ethers in % by area as determined by GPC measurement is equated to a content in % by weight.
23. (Currently amended) The process according to ~~any of claims 16 to 22~~ claim 16, wherein the oligomeric bisglycidyl ethers have a molecular weight as determined by GPC ~~in the range~~ from 380 to 1500 g/mol.
24. (Currently amended) The process according to ~~any of claims 16 to 22~~ claim 16, wherein the oligomeric bisglycidyl ethers have a molecular weight ~~in the range~~ from 568 to 1338 g/mol when R = H, ~~or and~~ have a molecular weight ~~in the range~~ from 624 to 1478 g/mol when R = CH₃.
25. (Currently amended) The process according to ~~any of claims 15 to 24~~ claim 15, wherein the hydrogenation is ~~carried out~~ conducted at a temperature ~~in the range~~ from 30 to 150°C.
26. (Currently amended) The process according to ~~any of claims 15 to 25~~ claim 25, wherein the hydrogenation is ~~carried out~~ conducted at an absolute hydrogen pressure ~~in the range~~ from 10 to 325 bar.
27. (Currently amended) The process according to ~~any of claims 15 to 26~~ claim 15, wherein the hydrogenation is ~~carried out~~ conducted over a fixed bed of catalyst.
28. (Currently amended) The process according to ~~any of claims 15 to 26~~ claim 15, wherein the hydrogenation is ~~carried out~~ conducted in a liquid phase in which the catalyst is present ~~in the form of~~ as a suspension.
29. (Currently amended) The process according to ~~any of claims 15 to 28~~ claim 15, wherein the aromatic bisglycidyl ether of the formula II is ~~used as~~ a solution in an organic solvent which is inert in respect of the hydrogenation, ~~with~~ the solution comprising from 0.1 to 10% by weight water, based on the solvent, ~~of water~~.

30. (Currently amended) The A process according to any of claims 15 to 29 for preparing bisglycidyl ethers of the formula I

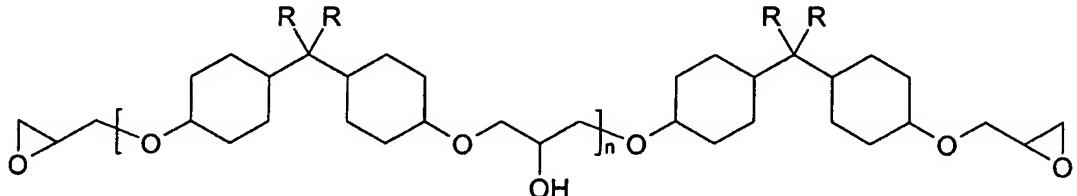


where R is CH₃ or H, by ring hydrogenation of the corresponding aromatic bisglycidyl ether of the formula II



in the presence of a heterogeneous ruthenium catalyst according to claim 1.

which have wherein the produced bisglycidyl ethers include a content of corresponding oligomeric ring-hydrogenated bisglycidyl ethers of the formula



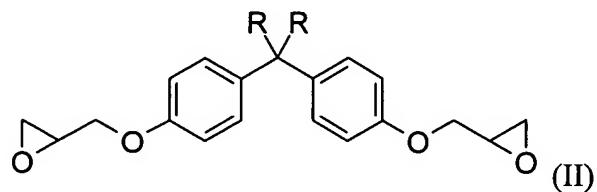
where n = 1, 2, 3 or 4, of less than 10% by weight.

31. (Currently amended) The process according to the preceding claim 30, wherein the bisglycidyl ether of the formula I has a content of corresponding oligomeric ring-hydrogenated biglycidyl ethers of less than 5% by weight.

32. (Original) The process according to claim 30, wherein the bisglycidyl ether of the formula I has a content of corresponding oligomeric ring-hydrogenated bisglycidyl ethers of less than 1.5% by weight.

33. (Original) The process according to claim 30, wherein the bisglycidyl ether of the formula I has a content of corresponding oligomeric ring-hydrogenated bisglycidyl ethers of less than 0.5% by weight.
34. (Currently amended) The process according to ~~any of claims 30 to 33~~ claim 31, wherein the content of oligomeric ring-hydrogenated bisglycidyl ethers is determined by heating the aromatic bisglycidyl ether for 2 hours at 200°C and for a further 2 hours at 300°C, in each case at 3 mbar.
35. (Currently amended) The process according to ~~any of claims 30 to 33~~ claim 30, wherein the content of oligomeric ring-hydrogenated bisglycidyl ethers is determined by GPC measurement (gel permeation chromatography).
36. (Currently amended) The process according to ~~the preceding~~ claim 35, wherein the content of oligomeric bisglycidyl ethers in % by area as determined by GPC measurement is equated to a content in % by weight.
37. (Currently amended) The process according to ~~any of claims 30 to 36~~ claim 30, wherein the bisglycidyl ether of the formula I has a total chlorine content determined in accordance with DIN 51408 of less than 1000 ppm by weight.
38. (Currently amended) The process according to ~~any of claims 30 to 37~~ claim 30, wherein the bisglycidyl ether of the formula I has a ruthenium content determined by mass spectrometry combined with inductively coupled plasma (ICP-MS) of less than 0.3 ppm by weight.
39. (Currently amended) The process according to ~~any of claims 30 to 38~~ claim 30, wherein the bisglycidyl ether of the formula I has a platinum-cobalt color number (APHA color number) determined in accordance with DIN ISO 6271 of less than 30.
40. (Currently amended) The process according to ~~any of claims 30 to 39~~ claim 30, wherein the bisglycidyl ether of the formula I has an epoxy equivalent weight determined in accordance with the standard ASTM-D-1652-88 ~~in the range~~ from 170 to 240 g/equivalent.

41. (Currently amended) The process according to ~~any of claims 30 to 40~~ claim 30, wherein the bisglycidyl ether of the formula I has a proportion of hydrolyzable chlorine determined in accordance with DIN 53188 of less than 500 ppm by weight.
42. (Currently amended) The process according to ~~any of claims 30 to 41~~ claim 30, wherein the bisglycidyl ether of the formula I has a kinematic viscosity determined in accordance with DIN 51562 of less than 800 mm²/s at 25°C.
43. (Currently amended) The process according to ~~any of claims 30 to 42~~ claim 30, wherein the bisglycidyl ether of the formula I has a cis-cis:cis-trans:trans-trans isomer ratio in the range 44-63%:34-53%:3-22%.
44. (Currently amended) The process according to ~~any of claims 30 to 43~~ claim 30, wherein the bisglycidyl ether is obtained by complete hydrogenation of the aromatic rings of a bisglycidyl ether of the formula II



where R is CH₃ or H, with the degree of hydrogenation being > 98%.